



SCUBA PHYSIOLOGICAL

Think You Know All
About Scuba Medicine?
Think Again

Editors

Prof. Costantino Balestra

Dr. Peter Germonpre

Simon Pridmore

SCUBA PHYSIOLOGICAL

Think You Know All About Scuba Medicine? Think Again!

SIMON PRIDMORE



SSI SCUBASCHOOLS INT.
® Albrecht Salm
Instructor No. 12653

AS
2017

TABLE OF CONTENTS

The Experts' View	5
Part 1	
SCUBA PHYSIOLOGICAL	
1. Why Scuba Physiological?	9
2. The Science of Diving: Original Introduction	13
3. Recreational Diving Today: Decompression Habits and Insights from DAN	16
4. Overview of Decompression Models	31
5. Arterial Bubbles, PFO and Pulmonary Shunts	52
6. Diving and the Blood Vessels	65
7. Bubble Measurement Techniques	83
8. Using Preconditioning to Improve Diving Safety	92
9. DCS Evaluation: Cluster Analysis of DCS	105
10. Controversies and Remote Management of DCS	114
11. Nitrogen Narcosis	141
12. Recreational Technical Diving	156
13. Commercial Diving	173
Part 2	
APPENDICES	
Food for Thought 1	193
Food for Thought 2	197
Food for Thought 3	201
Food for Thought 4	205
Food for Thought 5	207
Food for Thought 6	209
Glossary	213
Acronyms	231
Author / Editor: Scuba Physiological	235
Other books by Simon Pridmore	237
The Original Authors of The Science of Diving	239
References & Further Reading	245

If you are a diver; much of what you learn about topics such as decompression sickness and narcosis in your scuba diving classes is over-simplified and some of it is just plain wrong, as diver training agency texts have not kept pace with the science.

Despite 170 years of research, the nature of decompression sickness, decompression stress and narcosis remains unknown. Great advances have been made to make diving safer, but there are still glaring gaps in our knowledge.

Scuba Physiological provides us with a good summary of what we know, a glimpse of where current science is taking us, and a lot of very good tips to make us all safer divers now.

Author **Simon Pridmore** is an author of scuba diving books, travel books and, as you might expect, scuba diving travel guides. He also writes regular columns for a variety of magazines and speaks about diver training safety at conferences all over the world.

"This book makes it easy to understand the latest discoveries in diving research and our current understanding of what happens to our bodies when we dive."

JP Imbert: Decompression designer and technical diving pioneer

"An enjoyable, simplified read of a complex subject, which is easy for a non-scientist to comprehend. I would consider it an essential text for every diver's shelf."

Joseph Dituri PhD (c), CDR, US Navy saturation diving officer

ISBN 9781979164153



90000



9 781979 164153